Department for
Business, Energy
& Industrial Strategy

ENERGY AND CLIMATE CHANGE PUBLIC ATTITUDE TRACKER

Wave 20

February 2017

Introduction

In March 2012 the Department of Energy and Climate Change launched a tracking survey to understand and monitor public attitudes to the Department's main business priorities. On 14 July 2016, the Department of Energy and Climate Change (DECC) merged with the Department for Business, Innovation and Skills (BIS), to form the Department for Business, Energy and Industrial Strategy (BEIS). As such, the survey is now BEIS's Energy and Climate Change Public Attitudes Tracker (PAT). The PAT still consists of one annual survey every February and three shorter surveys, usually in April, July and November, which repeat a subset of questions where we think attitudes might shift with greater regularity or be influenced by seasonal factors. In 2015, the tracker was reviewed to ensure that the dataset would continue to offer valuable insight. A list of the changes made to date, covering both question content and frequency, is included in the annex.

This report presents summary headline findings from December 2016 (Wave 20) and primarily makes comparisons with data from the previous quarter, September/ October 2016 (Wave 19), and with data from Wave 16 which was conducted at the same point last year (December 2015).

The twentieth wave of data was collected between 14 and 18 December 2016 using face-to-face in-home interviews with a representative sample of 2,138 households in the UK. Data was collected using the Kantar TNS Omnibus, which uses a random location quota sampling method. The questionnaire was designed by BEIS and Kantar Public (formerly TNS BMRB) drawing on a number of questions from previous surveys. Questions were refined through cognitive testing. Full details of the methodology are provided in the technical note.

A complete list of changes to question set and frequency in the past 12 months is included in the annex of this report.

Table 1. Fieldwork dates and sample sizes for each wave.

	Fieldwork dates	Sample size
Wave 1	21 - 25 March 2012	2,121
Wave 2	27 June - 1 July 2012	2,100
Wave 3	26 - 30 September 2012	2,118
Wave 4	12 December 2012 - 2 January 2013	2,107
Wave 5	27 - 31 March 2013	2,051
Wave 6	3 - 7 July 2013	2,124
Wave 7	25 - 29 September 2013	2,103
Wave 8	11 - 15 December 2013	2,110
Wave 9	26 - 30 March 2014	2,040
Wave 10	25 - 29 June 2014	2,087
Wave 11	24 - 28 September 2014	2,103
Wave 12	10 December 2014 - 8 January 2015	2,119
Wave 13	18 - 29 March 2015	1,981
Wave 14	24 - 28 June 2015	2,118
Wave 15	23 - 27 September 2015	2,121
Wave 16	9 -13 December 2015	2,121
Wave 17	23 March 2016 - 27 March 2016	2,105
Wave 18	29 June - 3 July 2016	2,114
Wave 19	28 September - 2 October 2016	2,080
Wave 20	14 – 18 December 2016	2,138

Summary of headline findings

This summary provides selected headlines and highlights statistically significant differences between Wave 20 and previous waves. It is not an exhaustive overview of the findings. Please refer to the accompanying excel summary tables and excel dataset to see full responses to all survey questions:
https://www.gov.uk/government/collections/public-attitudes-tracking-survey.

Energy bills

Worries over paying for energy bills remained at their lowest level since the tracker began. At Wave 20, 20% were either very or fairly worried about paying for their energy bills. The level of worry was at its lowest amongst those with household incomes over £50,000 (11%), aged under 24 (12%) or over 65 (14%). Worry was highest amongst private renters (28%), those aged 35-44 (30%), social renters (30%), and those in social grade DE (27%).

The falling level of concern over energy bills over the course of the tracker has been accompanied by a drop in the proportion who are worried about other household expenses (food and other shopping, transport, and mortgage or rent payments); at Wave 20 only 5% said they were more worried about energy bills than other household expenses.

Energy suppliers and switching

Levels of trust in energy suppliers have shown little change from previous waves. Respondents remained most likely to trust suppliers to provide a bill which accurately reflects energy use (71%), and to provide a breakdown of the components of your bill (70%).

The proportion of respondents who plan to switch their energy supplier over the next 12 months has remained unchanged at Wave 20, at 5%. Similarly, there has been no change in the proportion saying they may switch supplier, remaining at 31%, so there remains no clear trend of change in expected switching levels. Those with household incomes over £35,000 (8%), and those aged between 35-44 (8%), or 45-54 (7%), were most likely to have firm plans to switch their energy supplier. In comparison, those aged over 55 (4%), under 24 (2%), and in social grade DE (3%) were less likely to have firm plans to switch.

Energy saving and wasting

The proportion of people that claim to give a lot of thought to saving energy in the home remained relatively stable at Wave 20. Just under a quarter claimed to give a lot of thought to saving energy at home (23%), whilst half claimed to give it a fair amount of thought (52%). The findings at Wave 20 were very similar to those at Wave 16, which was conducted at the same point of the year in 2015.

Renewable energy

Support for renewable energy has been consistently high since the survey began in 2012, at around 75-80%. However, there has been a small drop in the level of support; at Wave 20, 74% said they supported renewables, compared with 79% at Wave 19 and 78% at the same time the previous year (Wave 16). Opposition to renewables has remained very low at 4%, with only 1% strongly opposed. The main change at Wave 20 was an increase in the proportion saying they 'neither support nor oppose' renewables – up to 21% from 17% at the previous wave.

Support for renewables was particularly high for people with incomes over £50,000 (87%), in social grade AB (84%), or those with incomes between £25,000 and £49,999 (82%). Support for renewables was lower amongst those with household incomes under £16,000 (71%), those aged 65+ (69%), those in social grades DE (65%) and social renters (63%).

Nuclear energy

Support and opposition for the use of nuclear energy change slightly each wave but have remained fairly stable over the course of the tracker. There has been if anything a small decline trend in both figures, with the proportion saying they *neither* support or oppose now at its highest recorded level, 42%. At Wave 20, a third supported nuclear energy (36%), while one in five are opposed (20%). Those with household incomes over £50,000 (43%), male (47%), in social grades AB (45%), and aged over 65 (43%) were the most likely to support the use of nuclear energy.

Radioactive waste

At Wave 20, 18% said they knew a lot (2%) or a fair amount (16%) about the way the UK manages radioactive waste, whilst 82% knew not very much (35%) or nothing at all (47%). These results are consistent with previous waves.

Four in ten (41%) said they were aware of Geological Disposal Facilities (GDF). Most who were aware did not have a lot of knowledge; 20% said they were aware but did not really know what they are, and 18% knew a little about them. Only 3% said they knew a lot about GDF. Knowledge of GDF differs by gender and also social grade, with men (50%) more likely to claim knowledge than women (34%), and those in social grades AB (55%) much more likely to claim knowledge than those in social grades DE (32%).

Shale gas

Three quarters (75%) were aware of fracking at Wave 20, a slight decrease in awareness after an increase between Waves 18 (78%) and 19 (79%). Despite many people being aware of fracking, only a small proportion claimed to have detailed knowledge. At Wave 20, 12% claimed to know a lot about fracking, whilst 42% said they knew a little, and 21% were aware of it but did not really know what it was. Awareness of fracking was higher for those in social grade AB (87%), aged over 45 (86%), with incomes over £35,000 (86%), and home owners (85%).

The percentages of support and opposition have shown little change in recent waves but there have been changes in the reasons cited. When asked whether they support or oppose extracting shale gas, half of respondents selected either the neutral option (49%) or said they did not know (3%). This is likely to partly reflect a lack of detailed knowledge about fracking. Of those who did offer an opinion, more people were opposed (31%) to fracking than supported it (18%).

Follow-up questions were asked at Wave 20 to identify the most common reasons why people support, oppose, or are neutral towards fracking. The most common reasons for supporting fracking were reducing dependency from other countries for UK’s energy supply (33%), a need to use all available energy sources (27%), and reducing dependency on fossil fuels (27%). For those who support fracking, there was a decrease from Wave 19 in the percentage who believe there is a need to use all available energy sources and the percentage who think that fracking will be good for local jobs and investment. In this same group, there was an increase in the percentage who support fracking because they think it will reduce dependence from other countries for the UK’s energy supply as well as those who think that it will have a positive impact on the UK economy.

The most common reason for opposing fracking was the loss or destruction of natural environment (58%). Other commonly cited reasons for opposition to fracking were that there is a risk of contamination to water supply (27%) and that there is too much risk and uncertainty to support at present (23%). Changes from the previous wave in this group include an increase in those who believe there is a risk of contamination to water supply and a decrease in the percentage who believe that there is too much risk or uncertainty to support fracking at present. In this group, there was also a decrease in those who stated they opposed fracking because of negative reports in the media and also in the percentage who believe that fracking is not a safe process.

Of those who were neutral or did not know whether they support or oppose fracking, the majority put this down to not knowing enough about it (70%). Out of this group, there was a decrease in those who responded that they don't know enough about fracking and an increase in the percentage who have never heard of it.

Renewable heat

Questions on renewable heat were adapted at Wave 20 so that they were only asked of those who were aware of renewable heating systems. If respondents had never heard of renewable heating systems they were not asked the follow up questions to try to remove the need for guesswork.

At Wave 20, 63% were aware of renewable heating systems in general. Out of those who were aware of renewable heating systems, 53% were aware of air source heat pumps, 62% were aware of ground source heat pumps, 70% were aware of biomass boilers and 74% were aware of solar thermal panels. However the vast majority (90%) didn't have any of these systems installed in their home.

Only very small proportions were likely to install any of the measures in their home. Of those who knew a little or a lot about each renewable source but had not so far installed this only 12% were likely to install an air source heat pump, 6% were likely to install a ground source heat pump, 8% were likely to install biomass boilers and 13% were likely to install solar thermal panels. Of those who were unlikely to install these measures, the most common reasons given were it would cost too much to install (29%) and not owning their property, so would not be able to install this (25%).

When presented with a series of statements about renewable heating systems, a large proportion selected either the neither agree nor disagree or the don't know option. These percentages were high for all four statements, on whether renewable heating systems are expensive to install (41%), whether they would heat the home better than the current system (58%), are cheap to run (51%), and are less reliable than conventional heating systems (59%). These percentages have decreased since only asking those who are aware of renewable heating systems, but this highlights there is still a lack of knowledge amongst those who are aware of them.

Respondents were asked which sources they would trust the most for advice on which heating system to install. The most trusted sources were a tradesperson (24%), family and friends (18%), and the Energy Saving Advice Service or Home Energy Scotland (11%).

The majority of respondents claimed to pay a lot (19%) or a fair amount (50%) of attention to the amount of heat they use in their homes (69%), although this is a small decrease from 74% at Wave 17, when this question was last asked. The main reason for paying attention is to minimise the amount of money spent on heating the home (54%). Only 7%

said this was due to wanting to minimise environmental impacts. A third (31%) said they did not pay very much, or any, attention to heat use at home; this was most commonly due to households using as much heat as is required to be comfortable (47%).

Seven in ten would only replace their heating system if their current one had broken or begun to deteriorate (70%). Of those who would replace a working heating system (17%), the main reason for doing this would be to save money on current bills (48%). A smaller proportion cited getting a more environmentally friendly system (23%), and getting a more reliable system (26%) as the main reasons for doing this. Approximately half claimed to have a condensing boiler installed in their home (48%), and out of those who say they don't currently have one installed, only 14% would be likely to install one in the next few years.

Technical notes

The results shown here are based on 2,138 face-to-face in-home interviews conducted with a representative sample of UK adults aged 16+. Fieldwork was conducted between 14 and 18 December 2016 on the Kantar TNS Omnibus, which uses a random location quota sampling method (unchanged since Wave 1). The questionnaire was designed by BEIS and Kantar Public drawing on a number of questions from previous surveys. Questions were refined through cognitive testing. The representativeness of the data was controlled through sample design, fieldwork quotas and post-fieldwork weighting. Data were weighted for the following characteristics: sex, age, social grade, region and tenure. Results included here are based on weighted data.

Please refer to the full technical note at https://www.gov.uk/government/collections/public-attitudes-tracking-survey for further details.

Annex: changes to question set and frequency

Question	Frequency
Q4) How often, if at all, do you personally do any of the following? • Leave the lights on when you are not in the room • Boil the kettle with more water than you are going to use • Wash clothes at 30 degrees or lower • Try to keep rooms that you are not using at a cooler temperature than those you are using • Leave the heating on when you go out for a few hours	Annual
Q7) Which answer best applies to you and your household at the moment with regards to the following measures to heat your home and/or provide hot water? • Installing a biomass boiler (this may involve burning wood logs, pellets or chips to provide central heating and/or hot water) • Installing an air source heat pump • Installing a ground source heat pump • Installing solar thermal panels (this means solar panels for hot water, not solar PV panels which generate electricity) • Replacing an older gas boiler with a more efficient condensing gas boiler • Installing a micro-CHP (combined heat and power) unit	Annual
Q7_1A) The next few questions are about renewable heating systems, by renewable heat we mean heating systems which use energy from biomass or the sun, or which use electricity to draw heat from the ground, water, or air to heat your home. This does not include solar panels which produce electricity. How much, if anything do you know about the following types of renewable heating system… (air source heat pumps, ground source heat pumps, biomass boiler)? • Know a lot • Know a little about it • Aware of it but did not really know what it is • Never heard of it	New question in Wave 15. Annual from March 2016.
Q7_2) Thinking about these types of renewable heating system, how positive or negative would you say you are towards the idea of having a renewable heating system in your home?	New question in Wave 15. Annual from March 2016.

• Very positive • Fairly positive • Neither positive nor negative • Fairly negative • Very negative • Don’t know	
Q7_7a) Which of the following would you trust to provide advice about which heating system to install in your home? • A tradesperson (e.g. builder, plumber, gas fitter) • Heating system manufacturer • Friends/Family • Your energy supplier/another energy supplier • Green Deal assessor / adviser • The Energy Saving Advice Service (ESAS) or Home Energy Scotland • Your housing association • Your landlord • A company that installs renewable heating systems • Other (specify) • None of these • Don’t know	Annual
Q7_7b) And which one would you trust the most to provide advice about which heating system to install in your home? (same answer options as in Q7_7a)	Annual
Q7_8) How much attention do you pay to the amount of heat you use in your home? • A lot • A fair amount • Not very much • None at all • Don’t know	New question in Wave 15. Annual from March 2016.
Q7_9) You said that you pay [a lot/ a fair amount] of attention to the amount of heat you use in your home. What is the main reason for this? • To minimise the amount of money you spend on heat • To minimise the environmental impact of the heat you use • I want to make sure me/my household has sufficient heat to be comfortable	New question in Wave 15. Annual from March 2016.

• I struggle to control the amount of heat used • I want to keep control over the amount of heat used • Other reason (please specify) • Both of these equally • Neither of these / for another reason • Don't know	
Q7_10) You said that you pay [not very much/ no] attention to the amount of heat you use in your home. What is the main reason for this? • I use as much heat as is needed to be comfortable • I don't feel I can control the amount of heat used • I'm just not interested in the amount of heat used • I set controls at a level I'm comfortable with and then don't need to adjust them • Other reason (please specify) • Some/all of these reasons equally • None of these / for another reason • Don't know	New question in Wave 15. Annual from March 2016.
Q7_11) Now thinking about your heating system. Which of the statements on this screen comes closest to your view? • I will only replace my heating system when my current one breaks down or starts to deteriorate • I would consider replacing my heating system while it is still working • Not my decision to make because I'm renting the property/living with parents • Don't know	New question in Wave 15. Annual from March 2016.
Q7_12) Which of these would be the more important consideration in changing your heating system? • Saving money on what you spend on bills at present • Switching to a more environmentally friendly heating system • Having a more reliable heating system than my current one • Both of these equally • Neither of these / for another reason (state) • Don't know	New question in Wave 15. Annual from March 2016.
Q7_13) Have you heard of the Domestic Renewable Heat Incentive? • Yes • No	New question in Wave 15 (not asked in subsequent

• Don't know	waves).
Q13) Generally speaking, do you support or oppose the use of the following renewable energy developments: • On-shore wind • Biomass • Off-shore wind • Wave and tidal • Solar	Bi-annual
Q15c) You said that you support hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Good for local jobs and investment • Reduces dependence from other countries for UK's energy supply • Reduces dependence on fossil fuels (coal, oil) • Need to use all available energy sources • Will have positive impact on climate change / meeting carbon reduction targets • May result in cheaper energy bills • Will have positive impact on UK economy • Won't affect me/my local area so no personal impact • Positive reports in the media • Community benefits (included from Wave 19) • Shale Wealth Fund (included from Wave 19) • No specific reason (SINGLE CODE) • Other (specify) • Don't know	New question in Wave 16. Quarterly from Wave 17.
Q15d) You said that you oppose hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Loss/destruction of natural environment • Increased traffic/noise/disruption • Local house prices will fall • Use of chemicals in the process • Should focus on developing renewable energy sources • Should focus on developing other energy sources • Risk of contamination to water supply • Risk of earthquakes • Negative impact on climate change / meeting carbon reduction targets • Not a safe process • Will not be regulated effectively • Negative reports in the media • Too much risk / uncertainty to support at present	New question in Wave 16. Quarterly from Wave 17.

• No specific reason (SINGLE CODE) • Other (specify) • Don't know	
Q15e) You said that you neither support nor oppose hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Don't know enough about it • Not interested in it • I can see the positives and negatives • Haven't made up my mind yet • Will have no impact on me • There are many vocal campaigns and I don't know what to believe • Have never heard of it • Other (specify) • Don't know	New question in Wave 17. Quarterly from Wave 17.
Q20a) Over the course of a year, which of these do you think uses the most energy in your home? • Large appliances (e.g. fridge, washing machine) • Small appliances (e.g. toasters, hair dryers, vacuum cleaners) • Technological appliances (TV, laptop, phone - including charging these) • Keeping the house warm with central or other heating • Hot water I use (e.g. for showering, washing up) • Don't know	New question in Wave 15. Bi-annual from Wave 17.
Q20b) Over the course of a year, which of these do you think uses the second most energy in your home? (same answer options as in Q20b)	New question in Wave 15. Bi-annual from Wave 17.
Q23a) I'm now going to ask you how concerned you are about various things happening in the future. When I talk about 'the future' I mean the next 10-20 years. When answering please think about how concerned you would be if this happened, rather than how likely you think it is to happen. So, how concerned, if at all, are you about... • Steep rises in energy prices in the future • UK supplies of fossil fuels not being sufficient to meet the UK's demand for them	Bi-annual
Q23b) And still thinking about the next 10-20 years, how concerned, if at all, are you about...	Bi-annual

• Power cuts becoming more frequent in the future • The UK becoming too dependent on energy from other countries • The UK not investing fast enough in alternative sources of energy • The UK not developing technology to use existing sources of fossil fuels sufficiently	
Q23c) You said that you are [very / fairly] concerned about the UK becoming too dependent on energy from other countries. When you gave this answer, were you thinking about specific energy types? • No specific sources • Oil • Gas • Electricity • Other source (specify) • Don't know	New question in Wave 16. Bi-annual from the Wave 17.
Q24a) Do you know what the Energy performance certificate (EPC) rating for your property is? • Yes, I know the exact rating • Yes, I have a sense of what the rating is • I'm aware of EPCs but I don't know what the EPC rating for my home is • I've not heard of EPCs	New question in Wave 15. Annual from Wave 17.
Q26a) How much, if anything, do you know about the way the UK currently manages radioactive waste? • A lot • A fair amount • Not very much • Nothing at all	Quarterly
Q26b) The next question is about Geological Disposal Facilities. These are deep underground facilities for the permanent disposal of radioactive waste. Before today, how much, if anything, did you know about the UK's plans to dispose of radioactive waste in Geological Disposal Facilities in the UK? • Knew a lot about them • Knew a little about them • Aware of them but don't really know what they are • Never heard of them	Quarterly

Q35) Which of these energy types do you think is most used by UK households overall? • Gas • Electricity (including renewable energy) • Petroleum • Bioenergy and waste • Solid fuels (wood, coal) • Other • Don't know	Piloted in Wave 16. Replaced with Q37, Q38 and Q39.
Q36) And which energy type do you think is second most used by UK households overall? (same answer options as Q35)	Piloted in Wave 16. Replaced with Q37, Q38 and Q39.
Q37) As far as you know, which of these are used as energy sources in your home – for example, to provide heating or to power appliances? Please exclude anything used outside of your home – for example fuel for vehicles. • Electricity • Natural gas (mains gas) • Bottled gas • Oil • Wood • Coal • Other • Don't know	Replaced Q35 and Q36. Piloted in Wave 19.
Q38) And over the course of the year, which of these types of energy do you think your household spends the most money on? (same answer options as Q37)	Replaced Q35 and Q36. Piloted in Wave 19.
Q39) And over the course of the year, which of these types of energy do you think your household spends the next most money on? (same answer options as Q37)	Replaced Q35 and Q36. Piloted in Wave 19.
Q8) Before today, had you heard of smart meters? IF YES ASK: Do you have one? • Yes, I have one • Yes, but I do not have one	Increased frequency to bi-annual from Wave 19.

• No – I have never heard of them	
Q7) and Q7_1-12) See above for question text	Moved from annual wave to bi-annual wave (winter) from Wave 20, Q7_1-12 filtered to only ask those who say they know about renewable heating and new intro added to Q7. Introduction text added to Q7_3
Q7_1), Q7_1a/b/c), Q7_3)	Language of Q7_1 modified, this question is also asked of all respondents. Answers from this question are now used to route Q7_1a/b/c and Q7_3 and the new questions.
Q41-51) See Wave 20 questionnaire for question text	New questions in Wave 20.
Q52) As far as you know, do you have a condensing boiler in your home? If you're not sure, any gas boiler installed since 2006 will be condensing. Any oil boiler installed since 2008 will be condensing. • Yes – have a condensing boiler • No – don't have a condensing boiler • Don't know	New question in Wave 20.
Q53) How likely do you think you are to install a condensing boiler in your home over the next few years? • Very likely • Fairly likely • Not very likely	New question in Wave 20.

• Not at all likely • Don’t know	